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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,593	10/09/2001	Francesco Piazza	27656/37751	6167

4743 7590 09/03/2004

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EXAMINER

TIEU, BINH KIEN

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/973,593	PIAZZA, FRANCESCO	
	Examiner	Art Unit	
	BINH K. TIEU	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/11/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Dacus et al. (U.S. Pat. #: 6,223,061).

Regarding claim 1, Dacus et al. ("Dacus") teaches a radio frequency receiver, as shown in figures 1, 3 and 5, comprising:

circuit elements (i.e., divide-by-N block 42, divide-by-M block 6, phase detector/charge pump 10, etc.) a setting (i.e., divide factors M and N) of which is controlled by at least one control voltage (i.e., VCO controlled voltage 28);

a control unit for switching off the circuit elements during power-off periods (col.9, lines 17-35), and

a storage for storing the control voltage while circuit elements are switched off (i.e., passive loop filter/sample hold circuit 7; col.9, lines 13-22);

wherein the storage comprises a storage capacitor storing the control voltage (i.e., capacitors 20 and 22; col.7, lines 60-64; col.8, lines 23-32 and col.9, lines 7-10).

Art Unit: 2643

Regarding claim 2, note analog switch 14 in figures 1 through 4.

Regarding claim 3, note the capacitors 20 and 22 in the passive loop filter/sample hold circuit 7 in figures 1 through 4.

Regarding claim 4, note OP AMP buffer 26 in figures 1 through 4.

Regarding claim 5, note col.7, lines 55-64.

Regarding claim 6, note col.10, lines 27-38.

Regarding claim 7, note col.7, line 65 – col.8, line 32.

Regarding claims 8-9, note col.14, lines 19-37.

Regarding claim 10, note col.10, lines 7-21.

Regarding claim 11, note col.10, line 39 – col.11, line 27.

Regarding claim 12, note col.9, lines 11-55.

Regarding claim 13, Dacus teaches a radio frequency receiver comprising:
a frequency downconverter for downconverting an incoming signal to an intermediate frequency,

an oscillator circuit being connected to the downconverter, a frequency of said oscillator being controlled by a control voltage (col.14, lines 19-37),

a control unit for switching off the circuit elements during power-off periods (col.9, lines 17-35), and

a capacitor for storing the control voltage (i.e., capacitors 20 and 22; col.7, lines 60-64; col.8, lines 23-32 and col.9, lines 7-10) while oscillator are switched off (i.e., XCO 46 is turned off; col.9, lines 13-48);

Regarding claim 14, note col.10, lines 7-19.

Art Unit: 2643

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Although the DeLuca et al. (US. Pat. #: 5,448,756), Umetsu (U.S. Pat. #: 4,340,973), Wroblewski (U.S. Pat. #: 4,011,514), Erhart et al. (U.S. Pat. #: 5,128,632), Gotz (U.S. Pat. #: 4,511,923), Maier (U.S. Pat. #: 4,956,711), Herol et al. (U.S. Pat. #: 4,893,094) and Maier et al. (US. Pat. #: 4,590,611) are not applied into this Office Action, they are also called to Applicants attention. They may be used in future Office Action(s). Each of these references teaches the well-known subject matters of controlled voltage to be stored in a capacitor in a receiver circuitry.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh K. Tieu whose telephone number is (703) 305-3963 and E-mail address: BINH.TIEU@USPTO.GOV.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz, can be reached on (703) 305-4708 and **IF PAPER HAS BEEN MISSED FROM THIS OFFICIAL ACTION PACKAGE, PLEASE CALL Customer Service at (703) 306-0377 FOR THE SUBSTITUTIONS OR COPIES.**

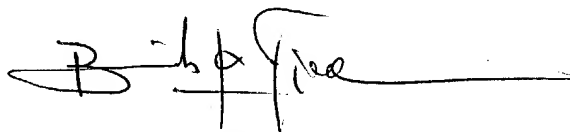
Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Sixth Floor (Receptionist, tel. No. 703-305-4700).



BINH TIEU
PRIMARY EXAMINER

Art Unit 2643

Date: September 01, 2004